ABSTRACT OF THE DISCLOSURE

A method and an apparatus for predicting intake manifold pressure are presented, to compensate for a large lag or a large time delay without producing an overshot or discontinuous behaviors of a predicted value. The method comprises the step of obtaining a difference of values of a variable to be predicted and a difference of values of another variable ahead of the variable to be predicted. The method further comprises the step of filtering the differences with adaptive filters. The method further comprises the step of obtaining a predicted difference of values of the variable to be predicted, through algorithm of estimation with fuzzy reasoning. The method further comprises the step of adding the predicted difference of values of the variable to be predicted, to a current value of the variable to be predicted, to obtain a predicted value of the variable to be predicted.